

## ABSTRACT

An improved technique and associated apparatus for timing  
5 calibration of a logic device is provided. A calibration test pattern is  
transferred to a logic device first at a data rate slower than normal operating  
speed to ensure correct capture of the pattern at the device to be calibrated.  
Once the pattern is correctly captured and stored, the test pattern is  
transmitted to the logic device at the normal operating data rate to perform  
10 timing calibration. The improved technique and apparatus permits the use  
of any pattern of bits as a calibration test pattern, programmable by the  
user or using easily-interchangeable hardware.